Allied Telesyn

Simply Connecting the World

MIB Structure (SIP/MGCP/NCS) VoIPTalk

Reference Manual

Rev C

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MIB Structure

This document lists and explains all parameters in the Allied Telesyn Management Information Base (MIB) structure. A description and possible values are provided to help you make the required changes to your system. Please read the comments very carefully before changing a parameter's value.

What is a MIB?

A *Management Information Base* (MIB) specifies what variables the network elements maintain (the information that can be queried and set by the manager). All variables are identified by object identifiers, a hierarchical naming scheme consisting of long strings of numbers that are normally abbreviated into a simple name, for human readability.

A MIB is structured like a tree. At the top of the tree is the most general information available about a network. Each branch of the tree then gets more detailed into a specific network area, with the leaves of the tree as specific as the MIB can get.

Allied Telesyn MIB Structure

The current MIB structure has three individual MIB files:

Table 1: Allied Telesyn MIB Structure

MIB	Description
Provisioning MIB	The *Provisioning MIB* allows you to set up all the parameters related to the VP500 communication unit. The Provisioning MIB contains all the functional parameters the unit uses to operate. All have been configured by default upon start up.
MGCP MIB	The *MGCP MIB* is used exclusively with VP500 communication units that run the Media Gateway Control Protocol (MGCP).
SIP MIB	The *SIP MIB* is used exclusively with VP500 communication units that run the Session Initiation Protocol (SIP).

Figure 1: MIB Structure

All parameters in the MIBs have been configured by default upon start up. However, if you need to modify some of these parameters (for example, parameters related to the country in which you are), use a SNMP browser.

Note: The AT-VP504E FXO communication units can only run the SIP signaling protocol.

Storage Clauses

In addition to the standard MIBs clauses, there are two STORAGE clauses for storage purpose:

- Persistent
- Volatile

Persistent Parameters

Persistent parameters are saved into the VP500 communication unit's memory and restored when the unit is rebooted or restarted. The only way to change the value of a persistent parameter is to manually update it with a SNMP browser or by provisioning a new configuration file.

Volatile Parameters

Volatile parameters are lost every time the VP500 communication unit is rebooted. This type of parameter includes toggling parameters such as requesting a configuration file or a software download. *Statistics* are also volatile parameters that are lost every time the unit is rebooted.

Changing a Parameter Value

Changing a parameter involves contacting the VP500 communication unit with any SNMP MIB browser. You can use the built-in SNMP editor of the Unit Manager. See the *IP Communication Server Administration Manual* for more details. Be sure that you use the MIB files that match the version of the MIB located inside the current software build of the unit.

You must then locate the proper parameter to modify and change its value. Most of the parameters will require that you reboot the VP500 communication unit. A reboot may be software-initiated or manually initiated with the power switch. It will delete all statistics stored and will overwrite all volatile parameter values in the configuration file. A reboot will also reinitiate the entire unit's initial provisioning sequence.

Switching Protocols

The MIB structure contains three MIB files, but only two are actually used at the same time:

- With the SIP signalling protocol: the VP500 communication unit uses the Provisioning MIB and SIP MIB.
- With the MGCP signalling protocol: the VP500 communication unit uses the Provisioning MIB and MGCP MIB.

You can switch between protocols and the proper MIB will be activated upon restart.

Note: If you are using AT-VP504E FXO communication units, switching protocol is not possible because these units can only run the SIP signaling protocol.

To switch MIB according to the protocol used:

- In the general Provisioning MIB, locate the *signaling ProtocolsSwitch* variable under the *signaling ProtocolsGroup*.

  This variable allows you to switch from one protocol to another.

- Set the *signalingProtocolsSwitch* variable to **0=MGCP** or **1=SIP**.

  The default value is **1=SIP**. The VP500 communication unit reboots automatically. After the unit restarts, it will use the selected MIB. For more details, see:

  - “Part 2: MGCP MIB” on page 49
  - “Part 3: SIP MIB” on page 57

Manual Conventions

The MIB parameters are presented in a table such as the following:

Table 2: MIB Parameters Example

Name	Access	Description	Dynamic
provisionningMibVersion	R-O	MIB version. **Default Value**: 1.0	N/A

The tables contain the following information:

- **Name**: Full name of the parameter as displayed in the MIB.
- **Access**: The parameter may have one of two access

types:

- *R/W*: the parameter is “Read/Write” and can be edited.
- *R-O*: the parameter is “Read-Only” and cannot be edited.

- **Description**: Short description of the parameter as displayed in the MIB. When possible, the default value for the parameter is provided.
- **Dynamic**: Describes the update status of the parameter, which can have three update types:
  - *Dynamic (Yes)*: The parameter value is updated automatically. You do not need to restart the VP500 communication unit.
  - *Not dynamic (No)*: The parameter value is not updated automatically. You must restart the VP500 communication unit for the change to take effect.
  - *Not Applicable (N/A)*: Applies to read-only parameters.

MIB Version

The following parameters give the current version of the Provisioning MIB and the VP500 communication unit model involved.

Table 3: MIB Version Parameters

Name	Access	Description	Dynamic
provisionningMibVersion	R-O	MIB version. **Default Value**: 1.0	N/A
analogGatewayID	R-O	VP500 communication unit model. **0 =** APA III-1 **1 =** APA III-4 FXS **2 =** APA III-4 FXO **3 =** APA III-4 FXS/FXO **Default Value:**	N/A

Part 1:
Provisioning MIB

2 InterfaceGroup Parameters

The Interface parameters allow you to set information pertaining to the IP addresses used by the VP500 communication unit.

Basic Interface Parameters

The basic interface parameters allow you to define the VP500 communication unit's network "signature".

Table 4: IP Interface Parameters

Name	Access	Description	Dynamic
interfaceQoSSignalingDSFiledValue	R/W	Signaling (SIP negociation) QoS Differentiated Services field value. **Default Value**: 184	Yes
interfaceQoSMediaDSFieldValue	R/W	Media (SIP negociation) QoS Differentiated Services field value. **Default Value**: 184	Yes
interfaceMacAddress	R-O	VP500 communication unit Ethernet MAC address. **Default Value**: 0090F8FFFFFF	N/A
interfaceUseDhcp	R/W	Select the provenance of the VP500 communication unit network configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	No
interfaceDhcpServerIp	R-O	DHCP server IP address. The field is empty if no DHCP server was found.	N/A

interfaceStatic-Group

The following parameters allow you to set static interface information for the VP500 communication unit.

Table 5: Interface Static Parameters

Name	Access	Description	Dymanic
interfaceStaticPrimDnsIp	R/W	Static primary DNS server IP address. **Default Value**: 192.168.0.10	No
interfaceStaticSecDnsIp	R/W	Static secondary DNS server IP address. **Default Value**: 192.168.0.10	No
interfaceStaticDefaultRouterIp	R/W	Static default router IP address. **Default Value**: 192.168.0.10	No
interfaceStaticSubnetMaskIp	R/W	Static subnet mask. **Default Value**: 255.255.255.0	No
interfaceStaticLocalIp	R/W	Static local IP address. **Default Value**: 192.168.0.1	No

interfaceDhcp-Group

The following parameters allow you to set DHCP information for the VP500 communication unit.

Table 6: Interface DHCP Parameters

Name	Access	Description	Dynamic
interfaceDhcpPrimDnsIp	R-O	Primary DNS server IP address provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
interfaceDhcpSecDnsIp	R-O	Secondary DNS server IP address provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
interfaceDhcpDefaultRouterIp	R-O	Default router IP address provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
interfaceDhcpSubnetMaskIp	R-O	Subnet mask provided by the DHCP server. **Default Value**: 255.255.255.0	N/A
interfaceDhcpLocalIp	R-O	Local IP address provided by the DHCP server. **Default Value**: 192.168.0.1	N/A

interfaceQoS-Group Parameters

The following parameters allow you to define the 802.1q settings of the VP500 communication unit.

Table 7: Interface QoS Parameters

Name	Access	Description	Dynamic
interfaceQoSSignalingIeee8021QFilterEnable	R/W	Enabling IEEE 802.1Q VLAN user priority tagging for VoIP signaling packet. This filter applies to any VoIP signaling protocol in use (e.g. MGCP or SIP). When the filter is disabled (as well as VLAN), no tag is added to the Ethernet header. Otherwise, each signaling packet is tagged with the user priority defined below. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
interfaceQoSSignalingIeee8021QUserPriority	R/W	IEEE 802.1Q VLAN user priority value for VoIP signaling packet. This value is used to set the user priority in the TCI field of the VLAN tag. Tagging user priority is applied only when the filter is enabled. In the case where the filter for signaling protocol is disabled and the VLAN option is enabled, the default user priority declared under the VLAN group will be used. Otherwise, the user priority set for signaling has precedence over the VLAN default user priority. • 7 = High priority • 0 = Low priority **Default Value**: 6	Yes
interfaceQoSMediaIeee8021QFilterEnable	R/W	Enabling IEEE 802.1Q VLAN user priority tagging for VoIP media packet. This filter applies to any VoIP media protocol in use (e.g. RTP, T.38). When the filter is disabled (as well as VLAN), no tag is added to the Ethernet header. Otherwise, each signaling packet is tagged with the user priority defined below. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes

Table 7: Interface QoS Parameters (Continued)

Name	Access	Description	Dynamic
interfaceQoSMediaIeee8021QUserPriority	R/W	IEEE 802.1Q VLAN user priority value for VoIP media packet. This value is used to set the user priority in the TCI field of the VLAN tag. Tagging user priority is applied only when the filter is enabled. In the case where the filter for signaling protocol is disabled and the VLAN option is enabled, the default user priority declared under the VLAN group will be used. Otherwise, the user priority set for signaling has precedence over the VLAN default user priority. • 7 = High priority • 0 = Low priority **Default Value**: 6	Yes

interfaceVlan-Group Parameters

The following parameters allow you to define the VLAN settings of the VP500 communication unit.

Table 8: Interface VLAN Parameters

Name	Access	Description	Dynamic
interfaceVlanIeee8021QTaggingEnable	R/W	Enabling IEEE 802.1Q VLAN tagging. With this option enabled, all packets are tagged with the Virtual ID (VID) specified below. The default user priority is to be applied in case of general protocol or when signaling or media protocol filtering is disabled.WARNING: Enable this option only on compatible LAN with equipment supporting the VLAN tagging. Otherwise, the Unit may be unreachable. In this case, please use the reset button to access and disable VLAN tagging - in the reset mode, tagging is not permitted. See IEEE 802.1Q for more information on this topic. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
interfaceVlanIeee8021QVirtualLanID	R/W	IEEE 802.1Q Virtual LAN ID. This is theVID to be applied in the TCI field when tagging is enabled. The value 1 is the default Port VID (PVID) for bridge port. The 4095 VID (0xFFF) is reserved for implementation use and it shall not be used in tag header.NOTE: As per standard, some bridges may not support the full range of VID. **Default Value**: 1	Yes
interfaceVlanIeee8021QDefaultUserPriority	R/W	IEEE 802.1Q Virtual LAN default user priority. This is the user priority to be applied in the TCI field when tagging is enabled. This value applies to all protocols for which no priority filtering is enabled (e.g. ARP, ICMP). • 7 = High priority • 0 = Low priority **Default Value**: 6	Yes

3 apaManager Parameters

The apaManager Group parameters allow you to set information pertaining to the Unit Manager, which is a module of the IP Communication Server used to set and provision the VP500 communication units.

apaManager Basic Parameters

The following parameters allow you to define basic information about the Unit Manager the VP500 communication unit will use.

Table 9: Unit Manager Parameters

Name	Access	Description	Dynamic
apaManagerEnable	R/W	Enable the Unit Manager. **0 =** Disable **1 =** Enable **Default Value**: 1	No
apaManagerUseDhcp	R/W	Select the provenance of the Unit Manager configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	Yes[a]
apaManagerTrapRetransmissionPeriod	R-W	TRAP retransmission period in ms. **Default Value**: 60000	Yes
apaManagerTrapRetransmissionRetryCount	R-W	TRAP retransmission retry count: • -1 = infinite - always retransmit **Default Value**: 10	Yes

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

apaManagerStatic-Group

The following parameters allow you to set static information pertaining to the Unit Manager.

Table 10: Unit Manager Static Parameters

Name	Access	Description	Dynamic
apaManagerStaticPrimHost	R/W	Static Unit Manager IP address or domain name. **Default Value**: 192.168.0.10	Yes
apaManagerStaticPrimTrapPort	R/W	Static Unit Manager IP port number on which traps must be sent. **Default Value**: 162	Yes

apaManagerDhcp-Group

The following parameters allow you to set DHCP information for the Unit Manager.

Table 11: Unit Manager DHCP Parameters

Name	Access	Description	Dynamic
apaManagerDhcpVendorSpecificCode	R/W	DHCP Unit Manager vendor specific code. **Default Value**: 200	Yes
apaManagerDhcpPrimHost	R-O	Unit Manager IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
apaManagerDhcpPrimTrapPort	R-O	Unit Manager IP port number, provided by the DHCP server, on which traps must be sent. **Default Value**: 162	N/A

4 apaUIGroup Parameters

The apaUIGroup parameters allow you to set the various permission settings used when making calls and to set information pertaining to the telephony services.

apaUIMapRule-Group Parameters

Note: The Provisioning MIB contains four (4) Dialing Map Rules. The parameter description is identical for each rule. For clarity's sake, only one generic set of parameters is described in this manual. When browsing through the Provisioning MIB, replace the "x" letter in the following parameters with the proper rule number (from 1 to 4).

apaUIMa-pRulexGroup

The following parameters allow you to define Dial Map Rule #n.

Table 12: apaUIMapRulex Group Parameters

Name	Access	Description	Dynamic
apaUIMapRulexEnable	R/W	Enable Dial Map Rule #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
apaUIMapRulexDialMap	R/W	Rule #n Dial Map. **Default Value**: x.T	Yes
apaUIMapRulexIsValid	R-O	Rule #n Dial Map validity. **0 =** Not valid **1 =** Valid **Default Value**: 0	N/A
apaUIMapRulexRemDigitEnable	R/W	Select if digits must be removed from the dialed number for Dial Map Rule #n. **0 =** Disable (do not remove digits) **1 =** Enable (remove digits) **Default Value**: 0	Yes
apaUIMapRulexRemDigitCount	R/W	Number of digits to remove from the dialed number for Dial Map Rule #n. **Default Value**: 0	Yes
apaUIMapRulexPrefixEnable	R/W	Select if digits must be prefixed to the dialed number for Dial Map Rule #n. **0 =** Disable (do not prefix digits) **1 =** Enable (prefix digits) **Default Value**: 1	Yes

Table 12: apaUIMapRulex Group Parameters (Continued)

Name	Access	Description	Dynamic
apaUIMapRulexPrefixDigit	R/W	Select the digits to prefix to the dialed number for Dial Map Rule #n. **0 =** Prefix Area code **1 =** Prefix Country code **2 =** Prefix Country code and Area code **Default Value**: 2	Yes

apaUIServices-Group

Note: The following parameters only apply to access communication units such as the AT-VP504E FXS.

apaUIService-sPortnGroup The following parameters allow you to define the services offered by the VP500 communication unit.

Note: Each port of the VP500 communication unit has its own set of parameters. The parameter description is identical for each port. For clarity's sake, only one generic set of parameters is described in this manual. When browsing through the Provisioning MIB, replace the "n" letter in the following parameters with the proper port number (from 1 to 4).

apaUIServicesPortnCallForwardUnconditionalGroup

Table 13: Portn Call Forward Unconditional Parameters

Name	Access	Description	Dynamic
apaUIServicesPortnCallForwardUnconditionalEnable	R/W	Unconditionally enable the Call Forward on port #n. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
apaUIServicesPortnCallForwardUnconditionalAddress	R/W	Address to which the phone call will be unconditionally forwarded. Address format = 'userInfo@host:portNumber' where: • userInfo = user name or telephone number (optional) • host = domain name or IP address • portNumber = port number (optional) **Default Value**:	Yes
apaUIServicesPortnCallForwardUnconditionalEnableStarNumber	R/W	Digits to dial after the star key to unconditionally enable the Call Forward. **Default Value**: 25	Yes

Table 13: Portn Call Forward Unconditional Parameters (Continued)

Name	Access	Description	Dynamic
apaUIServicesPortnCallForwardUnconditionalDisableStarNumber	R/W	Digits to dial after the star key to disable the unconditional Call Forward. **Default Value**: 26	Yes

apaUIServicesPortnCallForwardBusyGroup

Table 14: Portn Call Forward Busy Parameters

Name	Access	Description	Dynamic
apaUIServicesPortnCallForwardBusyEnable	R/W	Enable the Call Forward when busy on port #n. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
apaUIServicesPortnCallForwardBusyAddress	R/W	Address to which the phone call will be unconditionally forwarded. Address format = 'userInfo@host:portNumber' where: • userInfo = user name or telephone number (optional) • host = domain name or IP address • portNumber = port number (optional) **Default Value**:	Yes

apaUIServicesPortnCallForwardNoAnswerGroup

Table 15: Portn Call Forward No Answer Parameters

Name	Access	Description	Dynamic
apaUIServicesPortnCallForwardNoAnswerEnable	R/W	Enable the Call Forward on no answer on port #n. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
apaUIServicesPortnCallForwardNoAnswerAddress	R/W	Address to which the phone call will be unconditionally forwarded. Address format = 'userInfo@host:portNumber' where: • userInfo = user name or telephone number (optional) • host = domain name or IP address • portNumber = port number (optional) **Default Value**:	Yes
apaUIServicesPortnCallForwardNoAnswerNumberOfRings	R/W	Number of phone rings before forwarding the incoming call. **Default Value**: 3	Yes

5 gatewayGroup Parameters

The gatewayGroup parameters allow you to set the various permission settings used when making calls in gateway mode.

Note: The gatewayGroup parameters are used only by gateway units such as the AT-VP504E FXO.

gatewayGroup Basic Parameter

The following parameter allows you to define the General Dial Prefix to use when making calls.

Table 16: Gateway Group Basic Parameter

Name	Access	Description	Dynamic
gatewayGeneralDialPrefix	R/W	Prefix that must be dialed before any other numbers on a port used in FXO mode. **Default Value**:	Yes

gateway-PortnGroup

Note: Each port of the VP500 communication unit has its own set of parameters. The parameter description is identical for each port. For clarity's sake, only one generic set of parameters is described in this manual. When browsing through the Provisioning MIB, replace the "n" letter in the following parameters with the proper port number (from 1 to 4).

The following parameters allow you to set gateway information on Port #n.

Table 17: Gateway Port n Parameters

Name	Access	Description	Dynamic
gatewayPortnPermissionMode	R/W	Select port #n configuration used in FXO mode. **0 =** Net to PSTN **1 =** PSTN to Net **2 =** Both directions **Default Value**: 2	Yes

Table 17: Gateway Port n Parameters (Continued)

Name	Access	Description	Dynamic
gatewayPortnRedirectEnable	R/W	Enable the redirection of incoming calls on port #n used in FXO mode. **0 =** Disable (IP dial tone) **1 =** Enable (Redirected to address *gatewayPortxRedirectToAddress*) **Default Value**: 0	Yes
gatewayPortnRedirectToAddress	R/W	Address to which incoming calls on port #n are redirected. **Default Value**:	Yes

gatewayPermLocalSameACGroup

The following parameters allow you to set gateway permissions when making a Local Call in the same Area Code.

Table 18: Gateway Perm Local Same AC Parameters

Name	Access	Description	Dynamic
gatewayPermLocalSameACPrefix	R/W	Prefix that must be dialed before the destination number. The field is empty when no prefix is required (the destination call is local with the same area code as *countryAreaCode*). **Default Value**:	Yes
gatewayPermLocalSameACAllowed	R/W	Semi-colon separated list of numbers allowed to be called on a port used in FXO mode (the destination call is local with the same area code as *countryAreaCode*). **Default Value**:	Yes
gatewayPermLocalSameACAllowAll	R/W	Select which numbers are allowed to be called on a port used in FXO mode. **0 =** Only numbers in field *gatewayPermLocalSameACAllowed* **1 =** All numbers (The destination call is local with the same area code as *countryAreaCode*) **Default Value**: 0	Yes

gatewayPermLocalDiffACGroup

The following parameters allow you to set gateway permissions when making a Local Call in a different Area Code.

Table 19: Gateway Perm Local Diff AC Parameters

Name	Access	Description	Dynamic
gatewayPermLocalDiffACPrefix	R/W	Prefix that must be dialed before the destination number. The field is empty when no prefix is required (the destination call is local with a different area code than *countryAreaCode*). **Default Value**:	Yes
gatewayPermLocalDiffACAllowed	R/W	Semi-colon separated list of numbers allowed to be called on port used in FXO mode (the destination call is local with a different area code than *countryAreaCode*). **Default Value**:	Yes

Table 19: Gateway Perm Local Diff AC Parameters (Continued)

Name	Access	Description	Dynamic
gatewayPermLocalDiffACAllowAll	R/W	Select which numbers are allowed to be called on port used in FXO mode. **0 =** Only numbers in field *gatewayPermLocalSameACAllowed* **1 =** All numbers (The destination call is local with a different area code than *countryAreaCode*) **Default Value**: 0	Yes

gatewayPerm-LongDistSameAC-Group

The following parameters allow you to set gateway permissions when making a Long Distance Call in the same Area Code.

Table 20: Gateway Perm Long Distance Same AC Parameters

Name	Access	Description	Dynamic
gatewayPermLongDistSameACPrefix	R/W	Prefix that must be dialed before the destination number. The field is empty when no prefix is required (the destination call is long distance with the same area code as *countryAreaCode*). **Default Value**:	Yes
gatewayPermLongDistSameACAllowed	R/W	Semi-colon separated list of numbers allowed to be called on port used in FXO mode (the destination call is long distance with the same area code as *countryAreaCode*). **Default Value**:	Yes
gatewayPermLongDistSameACAllowAll	R/W	Select which numbers are allowed to be called on port used in FXO mode. **0 =** Only numbers in field *gatewayPermLocalSameACAllowed* **1 =** All numbers (The destination call is long distance with the same area code as *countryAreaCode*) **Default Value**: 0	Yes

gatewayPerm-LongDistDiffAC-Group

The following parameters allow you to set gateway permissions when making a Long Distance Call in a different Area Code.

Table 21: Gateway Perm Long Distance Different AC Parameters

Name	Access	Description	Dynamic
gatewayPermLongDistDiffACPrefix	R/W	Prefix that must be dialed before the destination number. The field is empty when no prefix is required (The destination call is long distance with a different area code than *countryAreaCode*). **Default Value**:	Yes

Table 21: Gateway Perm Long Distance Different AC Parameters (Continued)

Name	Access	Description	Dynamic
gatewayPermLongDistDiffACAllowed	R/W	Semi-colon separated list of numbers allowed to be called on port used in FXO mode (the destination call is long distance with a different area code than *countryAreaCode*). **Default Value**:	Yes
gatewayPermLongDistDiffACAllowAll	R/W	Select which numbers are allowed to be called on port used in FXO mode. **0 =** Only numbers in field *gatewayPermLocalSameACAllowed* **1 =** All numbers (The destination call is long distance with a different area code than *countryAreaCode*) **Default Value**: 0	Yes

gatewayPerm-LongDistDiffC-CGroup

The following parameters allow you to set gateway permissions when making a Long Distance Call in a different country.

Table 22: Gateway Perm Long Distance Different CC Parameters

Name	Access	Description	Dynamic
gatewayPermLongDistDiffCCPrefix	R/W	Prefix that must be dialed before the destination number. The field is empty when no prefix is required (the destination call is long distance with a different country code than *countryCountryCode*). **Default Value**:	Yes
gatewayPermLongDistDiffCCAllowed	R/W	Semi-colon separated list of numbers allowed to be called on port used in FXO mode (the destination call is long distance with a different country code than *countryCountryCode*). **Default Value**:	Yes
gatewayPermLongDistDiffCCAllowAll	R/W	Select which numbers are allowed to be called on port used in FXO mode. **0 =** Only numbers in field *gatewayPermLocalSameACAllowed* **1 =** All numbers (The destination call is long distance with a different country code than *countryCountryCode*). **Default Value**: 0	Yes

countryGroup Parameters

The Country Group parameters allow you to set information pertaining to the physical location of the VP500 communication unit.

Country Parameters

The country parameters allow you to define information that will be used when dialing.

Table 23: Country Group Parameters

Name	Access	Description	Dynamic
countryCountryCode	R/W	Country code associated to the current location of the VP500 communication unit. **Default Value**: 1	Yes
countryAreaCode	R/W	Area code associated to the current location of the VP500 communication unit. **Default Value**: 819	Yes
countrySelection	R/W	Select the default country that may be used for configuration. **0 =** Use Custom Configuration **1 =** North America 1 **2 =** North America 2 **3 =** Austria **4 =** France **5 =** Germany 1 **6 =** Germany 2 **7 =** UK **8 =** Italy **9 =** Spain **10 =** Switzerland **11 =** Sweden **12 =** Australia **13 =** Japan **Default Value**: 1	No
countryForceConfiguration	R/W	If the value is set to 1, every custom configuration selection will be overridden by the selected country configuration in countrySelection. **0 =** Do not override **1 =** Override any custom configuration selection **Default Value**: 1	No

portGroup Parameters

The Port Group parameters allow you to set information pertaining to the four ports of the VP500 communication unit.

General Parameters

Note: Each port of the VP500 communication unit has its own set of parameters. The parameter description is identical for each port. For clarity's sake, only one generic set of parameters is described in this manual. When browsing through the Provisioning MIB, replace the "n" letter in the following parameters with the proper port number (from 1 to 4).

The following parameters allow you to set port information for the VP500 communication unit.

Table 24: Port Parameters

Name	Access	Description	Dynamic
portnEnable	R/W	Enable VP500 communication unit port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
portnAnalogLineType	R/W	The analog telephone line type parameter defines the type of analog line used. Ground Start ensures proper Far End Disconnect between an FXO port and the PSTN. **0 =** Loop Start **1 =** Ground Start **Default Value**: 0	No
portnType	R-O	Port #n mode in use. **0 =** FXS **1 =** FXO **Default Value**: 0	N/A
portnConfigurationMode	R/W	Select the port mode to be used if port #n is a dual function port. **0 =** FXS **1 =** FXO **Default Value**: 0	No
portSilenceDetectionMode	R/W	Options for silence detection. **0 =** Disable **1 =** Disconnect if silence detected on SCN side **2 =** Disconnect if silence detected on IP side **3 =** Disconnect only when both sides have become silent **Default Value**: 0	No

Table 24: Port Parameters (Continued)

Name	Access	Description	Dynamic
portSilenceDetectionTimeout	R/W	When silence is detected on the line, period of silent time after which the line is hanged up. 300 seconds = 5 minutes. Values range from 0 to 300 seconds. **Default Value**: 300	No
portForcedEndOfCallEnable	R/W	Enable call interruption if unsuccessfull. **0 =** Disable **1 =** Enable **Default Value**: 1	No
portForcedEndOfCallTimeout	R/W	Forced end of call timeout in seconds. Values range from 0 to 180 seconds. **Default Value**: 30	No

portnDspGroup

The following parameters allow you to set DSP parameters.

Table 25: DSP Parameters

Name	Access	Description	Dynamic
portnDspMaxJitterBufferLen	R/W	Port #n maximum jitter buffer length in ms. **Default Value**: 150	No
portnDspTargetJitterBufferLen	R/W	Port #n target jitter buffer length in ms. **Default Value**: 50	No
portnDspAdaptativityJitterBuffer	R/W	Port #n adaptative jitter buffer. **0 =** OFF **1 =** ON **Default Value**: 1	No
portnDspVoiceActivityDetection	R/W	Port #n Voice Activity Detection (VAD). **0 =** OFF **1 =** Transparent **2 =** Conservative **Default Value**: 2	No
portnDspEchoCancelControl	R/W	Port #n echo cancel control. **0 =** OFF **1 =** ON **Default Value**: 1	No

portnDspUser-GainGroup

Table 26: DSP User Gain Parameters

Name	Access	Description	Dynamic
portnDspUserGainInputOffset	R/W	Port #n user input gain offset in dB. **Default Value**: -6	No

Table 26: DSP User Gain Parameters (Continued)

Name	Access	Description	Dynamic
portnDspUserGainOutputOffset	R/W	Port #n user output gain offset in dB. **Default Value**: -6	No

portnDspCountrySpecificGroup

Table 27: DSP Country Specific Parameter

Name	Access	Description	Dynamic
portnDspCountrySpecificLoopCurrent	R/W	Port #n country specific loop current. **Default Value**: 30	No

portnDspCountrySpecificGainGroup

Table 28: DSP Country Specific Gain Parameters

Name	Access	Description	Dynamic
portnDspCountrySpecificGainConfiguration	R/W	Select port #n country specific gain configuration. **0 =** Use custom configuration **1 =** Use default country configuration **Default Value**: 1	No
portnDspCountrySpecificGainBaseInput	R/W	Port #n country specific base input gain. **Default Value**: 3648	No
portnDspCountrySpecificGainBaseOutput	R/W	Port #n country specific base output gain. **Default Value**: 3029	No
portnDspCountrySpecificGainBaseInputOffset	R/W	Port #n coutry specific base input gain offset in dB. **Default Value**: 0	No
portnDspCountrySpecificGainBaseOutputOffset	R/W	Port #n country specific base output gain offset in dB. **Default Value**: 0	No

portnDspCodecGroup

Table 29: DSP Codec Parameter

Name	Access	Description	Dynamic
portnDspPreferredCodec	R/W	Select preferred port #n codec. **0 =** G.711 u-Law (PCMU) **1 =** G.711 a-Law (PCMA) **2 =** G.723.1 **3 =** G.729.AB **Default Value**: 0	Yes

portnDspCodecG711aLawGroup

Table 30: DSP Codec G711aLaw Parameters

Name	Access	Description	Dynamic
portnDspCodecG711aLawEnable	R/W	Enable G.711 a-Law (PCMA) on Port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
portnDspCodecG711aLawPTimeMin	R/W	Port #n minimum packetization time (ptime) for PCMA in ms. **Default Value**: 20	Yes
portnDspCodecG711aLawPTimeMax	R/W	Port #n maximum packetization time (ptime) for PCMA in ms. **Default Value**: 80	Yes

portnDspCodecG711uLawGroup

Table 31: DSP Codec G711uLaw Parameters

Name	Access	Description	Dynamic
portnDspCodecG711uLawEnable	R/W	Enable G.711 u-Law (PCMU) on Port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
portnDspCodecG711uLawPTimeMin	R/W	Port #n minimum packetization time (ptime) for PCMU in ms. **Default Value**: 20	Yes
portnDspCodecG711uLawPTimeMax	R/W	Port #n maximum packetization time (ptime) for PCMU in ms. **Default Value**: 80	Yes

portnDspCodecG7231Group

Table 32: DSP Codec G723.1 Parameters

Name	Access	Description	Dynamic
portnDspCodecG7231Enable	R/W	Enable G.723.1 on Port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
portnDspCodecG7231PTimeMin	R/W	Port #n minimum packetization time (ptime) for G.723.1 in ms. **Default Value**: 30	Yes
portnDspCodecG7231PTimeMax	R/W	Port #n maximum packetization time (ptime) for G.723.1 in ms. **Default Value**: 30	Yes
portnDspCodecG7231BaudRate	R/W	Port #n baud rate value for G.723.1. **0 =** 6.3Kbps **1 =** 5.3Kbps **Default Value**: 0	Yes

portnDspCodecG729ABGroup

Table 33: DSP Codec G729AB Parameters

Name	Access	Description	Dynamic
portnDspCodecG729ABEnable	R/W	Enable G.729.AB on Port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
portnDspCodecG729ABPTimeMin	R/W	Port #n minimum packetization time (ptime) for G.729.AB in ms. **WARNING**: Valid values are 10, 20, 30, and 40. The default value is used if the value is invalid. **Default Value**: 10	Yes
portnDspCodecG729ABPTimeMax	R/W	Port #n maximun packetization time (ptime) for G.729.AB in ms. **WARNING**: Valid values are 10, 20, 30, and 40. The default value is used if the value is invalid. **Default Value**: 10	Yes

portnDspCodecT38Group

Table 34: DSP Codec T.38 Parameter

Name	Access	Description	Dynamic
portnDspCodecT38Enable	R/W	Enable T.38 on Port #n. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes

portnDtmfGroup

The following parameter allow you to set DTMF Transport type.

Table 35: DTMF Parameter

Name	Access	Description	Dynamic
portnDtmfTransport	R/W	Attribute to select the type of DTMF transport. **0 =** In band **1 =** Out-of-Band using Signaling Protocol **2 =** Out-of-Band using RTP DTMF payload **Default Value**: 2	N/A

8 syslogGroup Parameters

The Syslog Group parameters allow you to set information pertaining to the Syslog daemon.

syslogGroup Basic Parameters

The following parameters allow you to set basic information pertaining to the Syslog daemon.

Table 36: Syslog Parameters

Name	Access	Description	Dynamic
syslogMsgEnable	R/W	Enable the syslog daemon messages. **0 =** Disable **1 =** Enable **Default Value**: 1	Yes
syslogTracingMask	R/W	Select the syslog mask: **0 =** Absolutely no Tracing **1 =** Critical errors **2 =** Error conditions **3 =** Warning conditions **4 =** Informational messages **5 =** Debug-level messages (use with care) Higher level mask include lower level masks. e.g.: Error conditions (2) include Critical errors (1) **Default Value**: 4	Yes
syslogUseDhcp	R/W	Select the provenance of the Syslog configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	Yes[a]

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

syslogStaticGroup

The following parameters allow you to set static information pertaining to the Syslog daemon.

Table 37: Syslog Static Parameters

Name	Access	Description	Dynamic
syslogStaticHost	R/W	Static Syslog server IP address or domain name. **Default Value**: 192.168.0.10	Yes
syslogStaticPort	R/W	Static Syslog server IP port number. **Default Value**: 514	Yes

syslogDhcpGroup

The following parameters allow you to set DHCP information for the Syslog daemon.

Table 38: Syslog DHCP Parameters

Name	Access	Description	Dynamic
syslogDhcpVendorSpecificCode	R/W	DHCP Syslog server vendor specific code. **Default Value**: 110	Yes
syslogDhcpHost	R-O	Syslog server IP address or domain name provided by the DHCP Server. **Default Value**: 192.168.0.10	N/A
syslogDhcpPort	R-O	Syslog server IP port number provided by the DHCP server. **Default Value**: 514	N/A

tftpGroup Parameters

The TFTP Group parameters allow you to set up the VP500 communication unit with the information pertaining to the server on which the software update is located.

tftpGroup Basic Parameters

The following parameters allow you to set basic information on the software update server.

Table 39: tftp Group Parameters

Name	Access	Description	Dynamic
tftpFileName	R/W	VP500 communication unit software file name to download from TFTP server. **Default Value**: apa.bin	Yes
tftpEmergencyFileName	R/W	Emergency VP500 communication unit software file name to download when the Rescue application starts. **Default Value**: apa_emergency.bin	Yes
tftpUseDhcp	R/W	Select the provenance of the TFTP server configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	Yes[a]
tftpTimeOut	R/W	Connection time-out value. **Default Value**: 30	Yes
tftpBlockSize	R/W	Default block size. **Default Value**: 1024	Yes
tftpDownloadStatus	R-O	TFTP VP500 communication unit software file download status. **0 =** Idle **1 =** Success **2 =** Fail **3 =** In Progress **4 =** Abort **Default Value**: 0	N/A

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

tftpServerStatic-Group

The following parameters allow you to set static information on the TFTP server.

Table 40: tftp Server Static Group Parameters

Name	Access	Description	Dynamic
tftpServerStaticHost	R/W	Static TFTP server IP address or domain name. **Default Value**: 192.168.0.10	Yes
tftpServerStaticPort	R/W	Static TFTP server IP port number. **Default Value**: 69	Yes

Table 40: tftp Server Static Group Parameters (Continued)

Name	Access	Description	Dynamic
tftpServerStaticEmergencyHost	R/W	Static emergency TFTP server IP address or domain name. **Default Value**: 192.168.0.10	Yes
tftpServerStaticEmergencyPort	R/W	Static emergency TFTP server IP port number. **Default Value**: 69	Yes

tftpServerDhcp-Group

The following parameters allow you to set DHCP information on the TFTP server.

Table 41: tftp Server DHCP Group Parameters

Name	Access	Description	Dynamic
tftpServerDhcpVendorSpecificCode	R/W	DHCP TFTP server vendor specific code. **Default Value**: 117	Yes
tftpServerDhcpHost	R-O	TFTP server IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
tftpServerDhcpPort	R-O	TFTP server IP port number provided by the DHCP server. **Default Value**: 69	N/A
tftpServerDhcpEmergencyVendorSpecificCode	R/W	DHCP emergency TFTP server vendor specific code. **Default Value**: 118	Yes
tftpServerDhcpEmergencyHost	R-O	Emergency TFTP server IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
tftpServerDhcpEmergencyPort	R-O	Emergency TFTP server IP port number provided by the DHCP server. **Default Value**: 69	N/A

10 apaByPassGroup Parameters

The APA Bypass Group is used to set information on the *System Failure Bypass* line connector, which is used as an emergency line in case of power or LAN failure.

apaByPassGroup Parameters

The following parameters are used to set up the behavior of the *Bypass* connector.

Table 42: VP500 Bypass Group Parameters

Name	Access	Description	Dynamic
apaByPassModeAlwaysEnable	R/W	Always enable VP500 communication unit bypass mode. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
apaByPassModeLanFailEnable	R/W	Enable VP500 communication unit bypass mode on a LAN failure. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
apaByPassModeServerFailEnable	R/W	Enable VP500 communication unit bypass mode on a server connection failure. **0 =** Disable **1 =** Enable **Default Value**: 0	Yes

11 apaSystemGroup Parameters

The APA System Group parameters are used to report on the current status of the VP500 communication unit.

apaSystemGroup Parameters

The following parameters report in the current VP500 communication unit status.

Table 43: APA System Group Parameters

Name	Access	Description	Dynamic
apaSystemOperationalStatusConfigFile	R-O	TFTP system operational configuration file download status. **0 =** Idle **1 =** Success **2 =** Fail **3 =** In Progress **4 =** Listening **Default Value**: 0	N/A
apaSystemLastRomCheck	R-O	Last ROM check status. **0 =** Fail **1 =** Success **Default Value**: 0	N/A
apaSystemLastRamCheck	R-O	Last RAM check status. • -1 = Not tested • 0 = Fail • 1 = Success **Default Value**: -1	N/A
apaSystemHardwareVersion	R-O	VP500 communication unit hardware version. **Default Value**: rev .X	N/A
apaSystemSoftwareVersion	R-O	VP500 communication unit software version. **Default Value**: 0.0.0.0	N/A

12 apaCmdGroup Parameters

The APA Command Group parameters are used to initiate tasks on the VP500 communication unit.

apaCmdGroup Parameters

The following tasks can be initiated.

Table 44: APA Cmd Group Parameters

Name	Access	Description	Dynamic
apaCmdStartTelnetBenchTest	R/W	Instruct the VP500 communication unit to reboot in Telnet bench test mode. **0 =** Off **1 =** On **Default Value**: 0	Yes
apaCmdMode	R/W	Not implemented ... for future use only. Select the VP500 communication unit command mode. **0 =** Enable the VP500 communication unit **1 =** Disable the VP500 communication unit **2 =** ReEnable the VP500 communication unit **3 =** Abrupt Restart (software reset immediately) **4 =** Graceful Restart (software reset when all calls have terminated) **5 =** Abrupt Shutdown (harware reset immediately) **6 =** Graceful Shutdown (harware reset when all calls have terminated) **7 =** Reset all statistics **8 =** Other **Default Value**:	Yes
apaCmdConfigurationMode	R/W	Select the VP500 communication unit configuration mode. • -1 = Request and wait for the Config File. When the mode is set to -1, a Config File Trap Info is sent to the apaManager to request a config file upload. The value is set back to 0 after the file is received. NOTE: The mode must be set to 1 to apply any new setting. • 0 = Record any changes (TFTP or SNMP) - Changes are recorded but won't be applied until the mode is set back to Commit. • 1 = Commit all changes - In this mode changes are automatically applied. NOTE: Some changes may require to reboot the system to take effect. • 2 = Undo all recorded changes - All changes recorded will be dismissed. The mode is set back to 1 afterward. **Default Value**: -1	Yes
apaCmdCheckRom	R/W	Check the validity of the ROM. **0 =** Off **1 =** On **Default Value**: 0	Yes

Table 44: APA Cmd Group Parameters (Continued)

Name	Access	Description	Dynamic
apaCmdCheckRam	R/W	Check the validity of the RAM. **0 =** Off **1 =** On **Default Value**: 0	Yes
apaCmdDownloadSoftware	R/W	Instruct the VP500 communication unit to download a file from TFTP server. **0 =** Off **1 =** On **Default Value**: 0	Yes
apaCmdRestart	R/W	Instruct the VP500 communication unit to reboot. **0 =** Off **1 =** On **Default Value**: 0	Yes
apaCmdRequestConfiguration	R/W	Select how the VP500 communication unit should request configuration. **0 =** Do not need to transfer the Config File **1 =** Request the Config File through TFTP **Default Value**: 1	Yes

13 snmpGroup Parameters

The SNMP Group parameters allow you to set information pertaining to the SNMP protocol.

snmpGroup Parameters

The following parameters allow you to define the SNMP settings of the VP500 communication unit.

Table 45: SNMP Group Parameters

Name	Access	Description	Dynamic
snmpAgentPort	R/W	SNMP Agent port number on which the unit must listen for SNMP requests. **Default Value**: 161	No
snmpSystemDescription	R/W	A textual description of the entity. This value should include the full name and version identification of the system's hardware type, software operating system, and networking software.	Yes
snmpSystemObjectID	R/W	The vendor's authoritative identification of the network management subsystem contained in the entity. This value is allocated within the SMI enterprises subtree (1.3.6.1.4.1) and provides an easy and unambiguous means for determining "what kind of box" is being managed. For example, if vendor "Flintstones, Inc." was assigned the subtree 1.3.6.1.4.1.4242, it could assign the identifier 1.3.6.1.4.1.4242.1.1 to its "Fred Router". **Default Value**: 1.3.6.1.4.1.4935.1.1.1.1	Yes
snmpSystemContact	R/W	The textual identification of the contact person for this managed node, together with information on how to contact this person. If no contact information is known, the value is the zero-length string.	Yes
snmpSystemName	R/W	An administratively-assigned name for this managed node. By convention, this is the node's fully-qualified domain name. If the name is unknown, the value is the zero-length string.	Yes
snmpSystemLocation	R/W	The physical location of this node (e.g., "telephone closet, 3rd floor"). If the location is unknown, the value is the zero-length string.	Yes
snmpSystemService	R/W	A value which indicates the set of services that this entity may potentially offer. The value is a sum. This sum initially takes the value zero, Then, for each layer, L, in the range 1 through 7, that this node performs transactions for, 2 raised to (L - 1) is added to the sum. For example, a node which performs only routing functions would have a value of 4 (2^(3-1)). In contrast, a node which is a host offering application services would have a value of 72 (2^(4-1) + 2^(7-1)). Note that in the context of the Internet suite of protocols, values should be calculated accordingly: layer functionality 1 physical (e.g., repeaters) 2 datalink/subnetwork (e.g., bridges) 3 internet (e.g., supports the IP) 4 end-to-end (e.g., supports the TCP) 7 applications (e.g., supports the SMTP) For systems including OSI protocols, layers 5 and 6 may also be counted. **Default Value**: 72	Yes

14 apaInfoGroup Parameters

The APA Info Group gives read-only information on all the various information used by the VP500 communication unit.

apaInfoInterface Parameters

The following parameters allow you to see information pertaining to the VP500 communication unit interface.

Table 46: apaInfoInterface Parameters

Name	Access	Description	Dynamic
apaInfoInterfacePrimDnsIpAddress	R-O	Primary DNS server IP address. **Default Value**: 192.168.0.10	N/A
apaInfoInterfaceSecDnsIpAddress	R-O	Secondary DNS server IP address. **Default Value**: 192.168.0.10	N/A
apaInfoInterfaceDefaultRouterIpAddress	R-O	Default router IP address. **Default Value**: 192.168.0.10	N/A
apaInfoInterfaceSubnetMask	R-O	Subnet mask. **Default Value**: 255.255.255.0	N/A
apaInfoInterfaceIpAddress	R-O	Local IP Adrress. **Default Value**: 192.168.0.1	N/A

apaInfoTftpGroup

The following parameters allow you to see information pertaining to the software download process.

Table 47: apaInfo TFTP Parameters

Name	Access	Description	Dynamic
apaInfoTftpWhoProvide	R-O	Provenance of the TFTP server configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	N/A
apaInfoTftpFileName	R-O	VP500 communication unit software file name to download from TFTP server. **Default Value**: apa.bin	N/A
apaInfoTftpIpAddress	R-O	TFTP server IP address. **Default Value**: 192.168.0.10	N/A
apaInfoTftpPort	R-O	TFTP server IP port number. **Default Value**: 69	N/A

apaInfoFileConfig-Group

The following parameters allow you to see information pertaining to the VP500 communication unit's configuration file.

Table 48: apaInfo File Config Parameters

Name	Access	Description	Dynamic
apaInfoFileConfigFileName	R-O	Configuration File name to download from the TFTP Server. **Default Value**: sip.cfg	N/A
apaInfoFileConfigFileVersion	R-O	Configuration File version to download from the TFTP Server. **Default Value**: 0	N/A
apaInfoFileConfigFileStatus	R-O	TFTP system operational config file download status. **0 =** Idle **1 =** Success **2 =** Fail **3 =** In Progress **4 =** Listening **Default Value**: 0	N/A

15 configTrapGroup Parameters

This chapter describes the traps messages that can be sent from the VP500 communication unit to the Unit Manager.

Config Trap Parameters

The Trap Info parameters give you information on the traps (messages) sent from the VP500 communication unit to the Unit Manager.

Table 49: Config Trap Parameters

Name	Access	Description	Dynamic
configTrapApaConfigInformation	N/A	The Unit Manager is trapped with the SIP Analog Gateway ID, the MAC address and the request configuration of the VP500 communication unit (the unit requests a configuration from the Unit Manager).	N/A
configTrapApaStatusInformation	N/A	The Unit Manager is trapped with the MAC address and the configuration mode of the VP500 communication unit (the unit confirms its configuration mode modification).	N/A
configTrapApaStatusConfigFile	N/A	The Unit Manager is trapped with the MAC address and the config file download status.	N/A

16 sntpGroup Parameters

This chapter describes the SNTP settings that can be set on the VP500 communication unit.

General Parameters

The general SNTP parameters allow you to enable and synchronize the SNTP feature.

Table 50: SNTP General Parameters

Name	Access	Description	Dynamic
sntpEnable	R/W	Enable SNTP Client. **0 =** Disable **1 =** Enable **Default Value:** 0	Yes
sntpSynchronizationPeriod	R/W	Interval in minutes before sending a SNTP time request to the SNTP server. Values range from 2 to 1440 seconds. **Default Value:** 1440	Yes
sntpSynchronizationPeriodOnError	R/W	Interval in minutes before sending a SNTP time request to the SNTP server after an SNTP error. Values range from 1 to 60 minutes. **Default Value:** 60	Yes
sntpUseDhcp	R/W	Select the provenance of the SNTP Server network configuration. **0 =** Static **1 =** Dhcp **Default Value:** 0	Yes[a]

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

sntpStaticGroup Parameters

The following parameters allow you to set static SNTP information for the VP500 communication unit

Table 51: Static SNTP Parameters

Name	Access	Description	Dynamic
sntpStaticHost	R/W	Static SNTP server IP address or domain name. **Default Value:** 192.168.0.10	Yes
sntpStaticPort	R/W	Static SNTP server IP port number. **Default Value:** 123	Yes

sntpDhcpGroup Parameters

The following parameters allow you to set DHCP information for the VP500 communication unit

Table 52: DHCP SNTP Parameters

Name	Access	Description	Dynamic
sntpDhcpVendorCodeSpecific	R/W	DHCP SNTP server vendor specific code. **Default Value:** 208	Yes
sntpDhcpHost	R-O	SNTP servers IP address or domain name provided by DHCP server. **Default Value:** 192.168.0.10	No
sntpDhcpPort	R-O	SNTP server IP port number provided by DHCP server. **Default Value:** 123	No

sntpTimeZone-ConfigGroup Parameters

The following parameters allow you to set TIme Zone parameters for the VP500 communication unit

Table 53: SNTP Time Zone Parameters

Name	Access	Description	Dynamic
sntpTimeZoneUseTimeZoneSelection	R/W	Enable the use of pre-configured time zone selection available. **0 =** Use custom time zone configuration **1 =** Use pre-configured time zone selection **Default Value:** 1	Yes
sntpTimeZoneTimeZoneSelection	R/W	Pre-configured time zone selection. NOTE: The clock is automatically adjusted for daylight saving time changes if applicable. **0 =** Pacific Time (Canada & US) (GMT - 8h) **1 =** Mountain Time (Canada & US) (GMT - 7h) **2 =** Central Time (Canada & US) (GMT - 6h) **3 =** Eastern Time (Canada & US) (GMT - 5h) **4 =** Atlantic Time (Canada) (GMT - 4h) **5 =** GMT Standard Time **6 =** W. Europe Standard Time (GMT + 1h) **7 =** China Standard Time (GMT + 8h) **8 =** Tokyo Standard Time (GMT + 9h) **9 =** Central Australia Standard Time (GMT + 9h30) **10 =** Australia Eastern Standard Time (GMT + 10h) **Default Value:** 1	Yes
sntpTimeZoneCustomTimeZoneConfiguration	R/W	Custom time zone configuration POSIX strings. **Default Value:** EST5DST4,M4.1.0/02:00:00,M10.5.0/02:00:00	Yes

Table 53: SNTP Time Zone Parameters (Continued)

Name	Access	Description	Dynamic
sntpTimeZoneCustomTimeZoneIsValid	R-O	Validate custom time zone entered. **0 =** Not valid. **1 =** Valid. **Default Value:** 0	N/A

Part 2:
MGCP MIB

17 mgcpConfiguration Parameters

The MGCP Configuration parameters allow you to set information exclusive to VP500 communication units that run the Media Gateway Control Protocol (MGCP).

Introduction

The MGCP MIB is used with VP500 communication units that run the Media Gateway Control Protocol (MGCP).

Table 54: MGCP MIB Version Parameter

Name	Access	Description	Dynamic
mgcpMibVersion	R-O	MIB version.	N/A

To use the MGCP MIB

- In the general Provisioning MIB, locate the *signalingProtocolsSwitch* variable under the *signalingProtocolsGroup*.

  This variable allows you to switch from one protocol to another.
- Set the *signalingProtocolsSwitch* variable to **0=MGCP**.
- Reboot the VP500 communication unit.

  After the VP500 communication unit restarts, it will use the MGCP MIB.

General Parameter

The following parameter allows you to set the UDP port number.

Table 55: General Parameter

Name	Access	Description	Dynamic
mgcpConfigurationResidentialGatewayPort Number	R/W	MGCP Residential Gateway UDP port number. This is the UDP port number on which the unit is listening for any MGCP request. **Default Value**: 2427	No

mgcpConfigurationEpIdGroup

The following parameters allow you to set information pertaining to endpoints.

Table 56: End Point Id Parameters

Name	Access	Description	Dynamic
mgcpConfigurationEpIdLocalNameTerm1	R/W	String that specifies the term of the endpoint name. **Default Value**: aaln	No
mgcpConfigurationEpIdGatewayFqdnUseDns	R/W	Select the provenance of the Fully Qualified Domain Name (FQDN). **0 =** Static **1 =** DNS **Default Value**: 0	No
mgcpConfigurationEpIdStaticGatewayFqdn	R/W	Static Fully Qualified Domain Name (FQDN) of the unit.	No

mgcpConfigurationCallAgentGroup

The following parameters allow you to set information pertaining to call agents.

Table 57: Call Agent Parameters

Name	Access	Description	Dynamic
mgcpConfigurationCallAgentUseDhcp	R/W	Select the provenance of the Call Agent configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	No

mgcpConfigurationCallAgentStaticGroup

Table 58: Call Agent Static Group

Name	Access	Description	Dynamic
mgcpConfigurationCallAgentStaticPrimary Address	R/W	Primary static Call Agent address. Can be a dotted IP string or a FQDN address. **Default Value**: 192.168.0.10	No
mgcpConfigurationCallAgentStaticPrimary PortNumber	R/W	Primary static Call Agent UDP port number. **Default Value**: 2727	No
mgcpConfigurationCallAgentStaticSecondary Address	R/W	Secondary static Call Agent address. Can be a dotted IP string or a FQDN address. **Default Value**: 192.168.0.10	No
mgcpConfigurationCallAgentStaticSecondary PortNumber	R/W	Secondary static Call Agent UDP port number. **Default Value**: 2727	No

mgcpConfigurationCallAgentDhcpGroup

Table 59: Call Agent DHCP Group

Name	Access	Description	Dynamic
mgcpConfigurationCallAgentDhcpPrimaryVendorSpecificCode	R/W	DHCP primary Call Agent vendor specific code. **Default Value**: 206	No
mgcpConfigurationCallAgentDhcpPrimaryAddress	R-O	Primary Call Agent address provided by DHCP server. Can be a dotted IP string or a FQDN address. **Default Value**: 192.168.0.10	N/A
mgcpConfigurationCallAgentDhcpPrimaryPortNumber	R-O	Primary Call Agent UDP port number provided by DHCP server. **Default Value**: 2727	N/A
mgcpConfigurationCallAgentDhcpSecondaryVendorSpecificCode	R/W	DHCP secondary Call Agent vendor specific code. **Default Value**: 207	No
mgcpConfigurationCallAgentDhcpSecondaryAddress	R-O	Secondary Call Agent address provided by DHCP server. Can be a dotted IP string or a FQDN address. **Default Value**: 192.168.0.10	N/A
mgcpConfigurationCallAgentDhcpSecondaryPortNumber	R-O	Secondary Call Agent UDP port number provided by DHCP server. **Default Value**: 2727	N/A

mgcpConfigurationRetransmissionGroup

The following parameters allow you to set retransmission information.

Table 60: Retransmission Parameters

Name	Access	Description	Dynamic
mgcpConfigurationRetransmissionAlgorithm	R/W	Retransmission algorith: **0 =** static **1 =** exponential **2 =** exponential with jitter **Default Value**: 2	No
mgcpConfigurationRetransmissionInitialPeriod	R/W	Retransmission initial period in ms. **Default Value**: 1000	No
mgcpConfigurationRetransmissionMaxPeriod	R/W	Retransmission maximum period in ms. **0 =** No maximum **Default Value**: 30000	No
mgcpConfigurationRetransmissionTimeout	R/W	Retransmission timeout in seconds. • -1 = infinite - always retransmit • 0 = none - never retransmit **Default Value**: 30	No
mgcpConfigurationRetransmissionRetryCount	R/W	Retransmission retry count. • -1 = infinite - always retransmit **Default Value**: 30	No

Table 60: Retransmission Parameters (Continued)

Name	Access	Description	Dynamic
mgcpConfigurationRetransmissionRsipInitial Delay	R/W	Delay in ms since the last RSIP to wait before sending the first RSIP for a new endpoint that wants to register. This is to avoid restart avalanche. **0 =** Send immediately **Default Value**: 0	No

mgcpConfigurationGenericMediaPackageGroup

The following parameters allow you to set information pertaining to the generic media package.

Table 61: Generic Media Package Parameters

Name	Access	Description	Dynamic
mgcpConfigurationGenericMediaPackageRt Duration	R/W	Ring back tone timeout value in ms. **Default Value**: 180000	No
mgcpConfigurationGenericMediaPackageRbk Duration	R/W	Ring back on connection tone timeout value in ms. **Default Value**: 180000	No

mgcpConfigurationDtmfPackageGroup

The following parameters allow you to set information pertaining to the DTMF package.

Table 62: DTMF Package Parameters

Name	Access	Description	Dynamic
mgcpConfigurationDtmfPackageDefaultDigit Map	R/W	The default Digit Map to apply. **Default Value**: 0-9T	No
mgcpConfigurationDtmfPackageInterdigit TimerShortDuration	R/W	If the gateway can't determine when the final digit is occured, the timer value is set to a short duration. • -1 = infinite • 0 = none **Default Value**: 4000	No
mgcpConfigurationDtmfPackageInterdigit TimerLongDuration	R/W	If the gateway can determine when the final digit has occured, the timer value is set to a long duration. • -1 = infinite • 0 = none **Default Value**: 16000	No

mgcpConfigurationLinePackageGroup

The following parameters allow you to set information pertaining to the line package.

Table 63: Line Package Parameters

Name	Access	Description	Dynamic
mgcpConfigurationLinePackageBzDuration	R/W	Busy tone timeout value in ms. **Default Value**: 30000	No
mgcpConfigurationLinePackageDlDuration	R/W	Dial tone timeout value in ms. **Default Value**: 16000	No
mgcpConfigurationLinePackageRgDuration	R/W	Ring tone timeout value in ms. **Default Value**: 180000	No
mgcpConfigurationLinePackageSlDuration	R/W	Stutter dial tone timeout value in ms. **Default Value**: 16000	No
mgcpConfigurationLinePackageOtDuration	R/W	Off hook warning tone timeout value in ms. **Default Value**: 65535000	No

mgcpStatusGroup Parameters

The MGCP Status parameters represent the actual status of the Media Gateway Control Protocol (MGCP).

Table 64: MGCP Status Parameters

Name	Access	Description	Dynamic
mgcpStatusProtocolVersion	R-O	Version of the MGCP protocol. **Default Value**: N/A	N/A
mgcpStatusStackVersion	R-O	Version of the MGCP stack. **Default Value**: N/A	N/A
mgcpStatusCallAgentAddress	R-O	The address of the Call Agent to which the unit is currently registered. **Default Value**: 0.0.0.0	N/A
mgcpStatusCallAgentPortNumber	R-O	Port number of the Call Agent. **Default Value**: 0	N/A
mgcpStatusRegistered	R-O	Unit status **0 =** NOT REGISTERED - The unit has not been able to successfully register with the call agent. **1 =** REGISTERED - The unit is registered with the call agent whose IP address is in *mgcpStatusCallAgentAddress*. **Default Value**: 0	N/A
mgcpStatusEndpointIdGatewayFqdn	R-O	Fully Qualified Domain Name (FQDN). **Default Value**: N/A	N/A

mgcpStatistics-Group Parameters

This chapter lists the various statistics information available for an VP500 communication unit that runs the Media Gateway Control Protocol (MGCP).

Table 65: MGCP Statistics Parameters

Name	Access	Description	Dynamic
mgcpStatisticsNumberOfActiveConnections	R-O	Number of active connections. **Default Value**: 0	N/A
mgcpStatisticsTotalNumberOfConnections	R-O	Total number of connections since the last start up. **Default Value**: 0	N/A
mgcpStatisticsAvgConnectionTime	R-O	Average connection time (in seconds) since the last restart. **Default Value**: 0	N/A
mgcpStatisticsTotalNumberOfErrors	R-O	The total number of the errors since the last start up. **Default Value**: 0	N/A

Part 3:
SIP MIB

18 sipUAGroup Parameters

The sipUA Group parameters allow you to set information exclusive to VP500 communication units that run the Session Initiation Protocol (SIP).

Introduction

The SIP MIB is used with VP500 communication units that run the Session Initiation Protocol (SIP).

Table 66: SIP MIB Version Parameter

Name	Access	Description	Dynamic
sipMibVersion	R-O	MIB version. **Default Value**: 1.0	N/A

To use the SIP MIB

- In the general Provisioning MIB, locate the *signalingProtocolsSwitch* variable under the *signalingProtocolsGroup*.

  This variable allows you to switch from one protocol to another.
- Set the *signalingProtocolsSwitch* variable to **1=SIP**.
- Reboot the VP500 communication unit.

  After the VP500 communication unit restarts, it will use the SIP MIB.

sipUA Basic Parameters

The following parameters allow you to define basic SIP User Agents information.

Table 67: sipUA Group Parameters

Name	Access	Description	Dynamic
sipUAPort	R/W	SIP User Agent IP port number. **Default Value**: 5060	Yes
sipUAProtocoleVersion	R-O	SIP stack protocol version. **Default Value**: 2.0	N/A
sipUAServiceOperStatus	R-O	Not implemented ... for future use only.	N/A
sipUAServiceAdminStatus	R-O	Not implemented ... for future use only.	N/A
sipUAServiceStartTime	R-O	Not implemented ... for future use only.	N/A

sipUALogGroup

The following parameters allow you to set parameters pertaining to the SIP logging client.

Table 68: sipUA Log Group Parameters

Name	Acccess	Description	Dynamic
sipUALogEnable	R/W	Enable the SIP logging client (allow the stack to log SIP packets). **0 =** Disable **1 =** Enable **Default Value**: 0	Yes
sipUALogUseDhcp	R/W	Select the provenance of the SIP logging client configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	Yes[a]

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

sipUALogStaticGroup

The following parameters allow you to set static information pertaining to the SIP logging client.

Table 69: sipUA Log Static Group Parameters

Name	Acccess	Description	Dynamic
sipUALogStaticHost	R/W	Static SIP logging client IP address or domain name. **Default Value**: 192.168.0.10	Yes
sipUALogStaticPort	R/W	Static SIP logging client IP port number. **Default Value**: 6000	Yes

sipUALogDhcpGroup

The following parameters allow you to set DHCP information for the SIP logging client.

Table 70: sipUA Log Group DHCP Parameters

Name	Acccess	Description	Dynamic
sipUALogDhcpVendorSpecificCode	R/W	DHCP SIP logging client vendor specific code. **Default Value**: 202	Yes
sipUALogDhcpHost	R-O	Logging client IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
sipUALogDhcpPort	R-O	Logging client IP port number provided by the DHCP server. **Default Value**: 6000	N/A

sipUAServerGroup

The following parameters allow you to set basic information pertaining to the SIP server configuration.

Table 71: sipUA Server Group Parameters

Name	Acccess	Description	Dynamic
sipUAServerOutboundProxyEnable	R/W	Not implemented ... for future use only. **0 =** Disable **1 =** Enable **Default Value**: 0	N/A
sipUAServerUseDhcp	R/W	Select the provenance of the SIP server configuration. **0 =** Static **1 =** DHCP **Default Value**: 1	Yes[a]

a. Only when at least one of the variables *xxUseDhcp* was set to **1** before starting the VP500 unit.

sipUAServer-StaticGroup

The following parameters allow you to set static information pertaining to the SIP servers.

Table 72: sipUA Server Static Group Parameters

Name	Acccess	Description	Dynamic
sipUAServerStaticRegistrarHost	R/W	Static SIP registrar server IP address or domain name. **Default Value**: 192.168.0.10	Yes
sipUAServerStaticRegistrarPort	R/W	Static SIP registrar server IP port number. **Default Value**: 5060	Yes
sipUAServerStaticProxyHost	R/W	Static SIP proxy server IP address or domain name. **Default Value**: 192.168.0.10	Yes
sipUAServerStaticProxyPort	R/W	Static SIP proxy server IP port number. **Default Value**: 5060	Yes
sipUAServerStaticOutboundProxyHost	R/W	Not implemented ... for future use only. --- Static SIP outbound proxy server IP address or domain name. **Default Value**: 192.168.0.10	N/A
sipUAServerStaticOutboundProxyPort	R/W	Not implemented ... for future use only. --- Static SIP outbound proxy server IP port number. **Default Value**: 5060	N/A

sipUAServerD-hcpGroup

The following parameters allow you to set DHCP information for the SIP servers.

Table 73: sipUA Log Group Parameters

Name	Acccess	Description	Dynamic
sipUAServerDhcpRegistrarVendorSpecificCode	R/W	DHCP SIP registrar server vendor specific code. **Default Value**: 203	Yes

Table 73: sipUA Log Group Parameters (Continued)

Name	Acccess	Description	Dynamic
sipUAServerDhcpRegistrarHost	R-O	SIP registrar server IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
sipUAServerDhcpRegistrarPort	R-O	SIP registrar server IP port number provided by the DHCP server. **Default Value**: 5060	N/A
sipUAServerDhcpProxyVendorSpecificCode	R/W	DHCP SIP proxy server vendor specific code. **Default Value**: 204	Yes
sipUAServerDhcpProxyHost	R-O	SIP proxy server IP address or domain name provided by the DHCP server. **Default Value**: 192.168.0.10	N/A
sipUAServerDhcpProxyPort	R-O	SIP proxy server IP port number provided by the DHCP server. **Default Value**: 5060	N/A
sipUAServerDhcpOutboundProxyVendorSpecificCode	R/W	Not implemented ... for future use only. --- DHCP SIP outbound proxy server vendor specific code. **Default Value**: 205	Yes
sipUAServerDhcpOutboundProxyHost	R-O	SIP outbound proxy server IP address or domain name provided by DHCP server. **Default Value**: 192.168.0.10	N/A
sipUAServerDhcpOutboundProxyPort	R-O	SIP outbound proxy server IP port number provided by DHCP server. **Default Value**: 5060	N/A

sipUAnGroup

Note: The SIP MIB may have four (4) User Agents. The parameter description is identical for each agent. For clarity's sake, only one generic set of parameters is described in this manual. When browsing through the Provisioning MIB, replace the "n" letter in the following parameters with the proper rule number (from 1 to 4).

The following parameters allow you to set parameters for the SIP User Agent #n.

Table 74: sipUAn Group Parameters

Name	Acccess	Description	Dynamic
sipUAnPrefixCCAndAC	R/W	Select if the Country Code and Area Code must be prefixed to the main alias for SIP User Agent #n. **0 =** Do not prefix Country Code and Area Code **1 =** Prefix Country Code and Area Code **Default Value**: 1	Yes
sipUAnMainAlias	R/W	Main alias for SIP User Agent #n. An alias is either a user name or a telephone number. **Default Value**: 3331111	Yes

Table 74: sipUAn Group Parameters (Continued)

Name	Acccess	Description	Dynamic
sipUAnFriendlyName	R/W	Friendly name for SIP User Agent #n. **Default Value**: Port 1	Yes
sipUAnOtherAliases	R/W	Semi-colon separated list of other aliases for SIP User Agent #n. An alias is either a user name or a telephone number. **Default Value**:	Yes
sipUAnMustUseSessionTimers	R/W	Select if the session timer must be used. **0 =** Don't use session timer. **1 =** Must use session timer. **Default Value**: 0	Yes
sipUAnMaximumSessionExpirationDelay	R/W	Set the maximun session expiration delay in seconds. If *sipUAnMustUseSessionTimers* is set to 1, then an INVITE is sent every *n* seconds, where *n* is specified in the *sipUAnMaximumSessionExpirationDelay* variable. If an INVITE does not get an answer, then the call is terminated. This option allows to detect the end of a call caused by a communication problem on the network. If *sipUAnMustUseSessionTimers* is set to 0 and the network is cut off between the two telephones, then it will not be possible to detect the end of the call, because no end of communication packet will be received. **Default Value**: 60	Yes

sipUAnAuth-Group

Table 75: sipUAn AuthGroup Parameters

Name	Acccess	Description	Dynamic
sipUAnAuthUsrPwd	R/W	Username and password used for authentication. This value is used only by this port. **Default Value**:	Yes
sipUAnAuthValid	R-O	This value is set to: **1 =** Value *sipUAxAuthUsrPwd* is valid. **0 =** Value *sipUAxAuthUsrPwd* has a syntax error. **Default Value**:	N/A

sipUAAuthGroup

The following parameters allow you to set parameters for the all of the SIP User Agents

Table 76: sipUA AuthGroup Parameters

Name	Acccess	Description	Dynamic
sipUAAuthUsrPwd	R/W	Username and password used for authentication. This value is used by all ports. **Default Value**:	Yes

Table 76: sipUA AuthGroup Parameters (Continued)

Name	Acccess	Description	Dynamic
sipUAAuthValid	R-O	This value is set to: 1 = Value *sipUAAuthUsrPwd* is valid. 0 = Value *sipUAAuthUsrPwd* has a syntax error. **Default Value**: 1	N/A

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